

REMARKS

Claims 1 to 11 are pending in this application. Claims 12 to 19 were restricted.

Applicants wish to thank the Examiner for extending the courtesy of conducting a telephone interview that took place on June 17, 2003. Applicants also again wish to thank the Examiner for acknowledging that claims 7 to 11 are allowable.

The rejection of claims 1 to 6 under 35 USC 103(a) for being obvious under U.S. Patent No. 3,118,887 to Hardy et al. (Hardy) is respectfully traversed. The Office Action acknowledges that Hardy only discloses examples of tris(2-hydroxynaphthyl)-triazines and not the mono(2-hydroxynaphthyl)-triazines of the present invention. The Office Action contends that Hardy teaches the equivalency of mono and tris(2-hydroxynaphthyl)-triazines by the definition of X,Y and Z in Formula I at col.1, line 60. The Office Action also contends that it would have been obvious to one skilled in the art to make a mono(2-hydroxynaphthyl)-triazines based on the disclosure of tris(2-hydroxynaphthyl)-triazines (Example 8 in Hardy) and the procedure taught in Hardy at col. 2, line 64 to col. 3, line 13.

Applicants respectfully submit that the present invention is not rendered obvious by Hardy for the following reasons: (1) the Office Action has not made out a proper prima facie case for obviousness, (2), the Office action is using an improper "obvious to try standard" and (3) in the alternative, the unexpected and surprising results shown in the two declarations by Dr. Ram Gupta overcomes the obviousness rejection.

It is well known in the art that for an effective UV absorber, it is important that it should possess the following three characteristics (for example, see Hardy U.S. Patent 3,118,887; column 1, line 25-55): (1) it should have good absorbance (higher the better) in the UV region(s) to be protected; (2) it should have low inherent color (lower the better), so that it does not impart color to the formulation or substrate to be stabilized, and (3) it should have reasonable solubility for incorporation into various formulations, such as in polymers, coatings, and cosmetics. The two declarations by Dr. Gupta demonstrate that the closest prior art compound, i.e., the symmetrical tris(2-hydroxynaphthyl)-triazine in Example 8 of Hardy, does not meet these criteria and that the compound in Example 3 of the present invention is surprisingly and dramatically better than the symmetrical prior art compound, which is totally unexpected. It should be noted that all UV absorbance and Yellow index comparisons provided in Dr. Gupta's declarations were conducted using the same instruments in the same solvent and at the same concentrations for both UV samples, i.e., a direct comparison.

Prima Facie case

Applicants respectfully submit that the Office Action has not made out a proper prima facie case for obviousness. To establish a proper prima facie rejection under 35 U.S.C. §103, the prior art itself must suggest the modification or provide the reason or motivation for making such modification. In re Laskowski, 871 F.2d 115, 117, 10 U.S.P.Q.2d 1397, 1398-99 (Fed. Cir. 1989). The Office Action has identified that the closest prior art is the symmetrical tris(2-hydroxynaphthyl)-triazine of example 8 in Hardy. As demonstrated by the data disclosed in Dr. Gupta's declarations, the tris(2-hydroxynaphthyl)-triazine is not a good UV absorber based on its poor UV absorbance in the UV-B region, its high color in the visible region and its poor solubility characteristics. Applicants respectfully submit that one skilled in the art would not be motivated to make the mono(2-hydroxynaphthyl)-triazine compounds of the present invention based on the characteristics of the symmetrical tris(2-hydroxynaphthyl)-triazine compound disclosed in Hardy since the symmetrical compound has poor UV absorbance parameters. This is especially true based on the disclosure in Hardy, which states that the symmetrical tris-orthohydroxyphenyl(or naphthyl)-triazines are particularly preferred (see Hardy at col.2, lines 28 to 32.) If the symmetrical tris(2-hydroxynaphthyl)-triazine is a particularly preferred UV absorber, but has such poor UV absorbance characteristics, why would there be a motivation to make asymmetrical compounds containing only one 2-hydroxynaphthyl group? A prior art reference must be considered in its entirety including sections which would lead away from the claimed invention (see MPEP 2141.02 (citing *W.L. Gore & Associates v. Garlock, Inc.* 220 USPQ 303 (Fed Cir. 1983))). Applicants respectfully submit that there would not be a motivation to make the mono(2-hydroxynaphthyl)-triazine compounds based on the disclosure in Hardy and the fact that the tris(2-hydroxynaphthyl)-triazine is not a good UV absorber. Hence, a proper prima facie case has not been made and the rejection should be withdrawn.

Applicants also respectfully submit that the Office Action is using an improper "obvious to try" standard. As the Board of Patent Appeals and Interferences discussed in Ex parte Obukowicz, 27 U.S.P.Q. 2d 1063 (1992), a prior art reference that only gives general guidance and is not at all specific to the particular form of the claimed invention and how to achieve it may make a certain obvious to try, but does not make the claimed invention obvious, citing In re O'Farrell, 853, F.2d 894, 7 U.S.P.Q. 1673, 1681 (Fed. Cir. 1988). The Office Action's argument is an obvious to try standard because Hardy merely only provides general guidance on how to make the compounds of Formula I, but does not specifically teach or suggest to make the specific compounds of the present invention. Also, since general Formula I in Hardy is so general and non-specific, there is no motivation to make any specific compound, and especially the compounds of the present invention. Thus, the obvious rejection should be withdrawn.

Unexpected Results

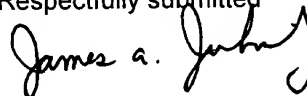
Finally, assuming for the sake of argument that a proper prima facie case was made, Applicants have, as shown with the data supplied in Dr. Gupta's two declarations, come forward with evidence rebutting the alleged prima facie case. A prima facie case can be rebutted by showing superior or unexpected results. MPEP 2144.09. Applicants have supplied a direct comparison to the closest prior by showing that the mono(2-hydroxynaphthyl)-triazine compound of the present invention is vastly superior over the symmetrical tris(2-hydroxynaphthyl)-triazine compound disclosed in Example 8 of Hardy with respect to UV absorbance, inherent color (Yellow Index) and solubility. These parameters are very important in gauging the suitability and desirability of a compound for a UV absorber. Thus even if the Office Action is correct that Hardy teaches the equivalency of mono and tris(2-hydroxynaphthyl)-triazines, Applicants have rebutted the obviousness rejection by demonstrating that the mono(2-hydroxynaphthyl)-triazine has unexpectedly superior results over the prior art symmetrical tris(2-hydroxynaphthyl)-triazine compound. Thus, the obviousness rejection should be withdrawn.

It is believed that pending claims 1 to 11 are in condition for allowance and an early notification of such allowance would be appreciated.

Applicants would like to remind the Examiner that claims 12 to 19 have not been withdrawn from this Application. If claims 1 to 6 are allowable, Applicants respectfully request that method claims 12 to 14 be rejoined under MPEP §821.04 since all the product claims are allowable and the non-elected method claims include all the limitations of the product claims.

In addition, Applicants also would request rejoinder of composition claims 15 to 19, since if products claims 1 to 11 are novel and non-obvious, any claims that wholly depend on claims 1 to 11 would also be novel and non-obvious. Since claims 15 to 19 wholly depend on claims 1 to 11, they should be rejoined.

Respectfully submitted



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